

Operating Instructions

STEREO DOUBLE CASSETTE DECK AMPLIFIER

DC-Z74

FM/AM DIGITAL SYNTHESIZER TUNER

F-Z94

STEREO TURNTABLE

PL-Z94

LINE VOLTAGE SELECTOR SWITCHES

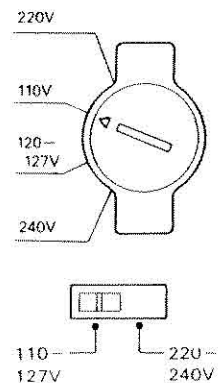
Only multi-voltage models are provided with these switches. U.S., Canadian, European, U.K., and Australian models are provided with this switch.

Mains voltages in Saudi Arabia 127 V and 220 V only. Never use this model with 110 V setting in Saudi Arabia.

Before your model is shipped from the factory, these switches are set to the power requirements of the destination; nevertheless, you should check that they are set properly before plugging the power cord into the AC outlet.

1. Disconnect the power cord.
2. Use a medium-size screwdriver.
3. Insert the screwdriver into the groove on the voltage selectors and adjust so that the tip of the arrow points to the voltage value of your area.

TWO VOLTAGE SELECTORS



COMPACT
disc
DIGITAL AUDIO

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT



The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



CAUTION
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

 **PIONEER®**
The Art of Entertainment

[For stereo double cassette deck amplifier]

INFORMATION TO USER [FOR U.S. MODEL]

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient the receiving antenna
- relocate this equipment with respect to the receiver
- move this equipment away from the receiver
- plug this equipment into a different outlet so that equipment and receiver are on different branch circuits

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems"

This booklet is available from the US Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

The above instructions apply only to units which will be operated in the United States

Thank you for buying this PIONEER product.

Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.

In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

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CAUTIONS REGARDING HANDLING

LOCATION

Install the unit in a well ventilated location where it will not be exposed to high temperature or humidity.

Do not install the unit in a location which is exposed to direct sunlight, or near to hot appliances or radiators. Excessive heat can adversely affect the cabinet and internal components. Installation of the unit in a damp or dusty environment may result in malfunction or accident. (Also avoid installation near cookers etc., where the unit may be exposed to smoke from oil, steam or heat.)

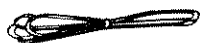
PRECAUTIONS REGARDING INSTALLATION

- Placing and using the unit for long periods on heat-generating sources such as amplifiers will affect performance. Avoid placing the unit on the heat-generating sources.
- Install the unit as far as possible from TV sets. The unit installed in close proximity to such equipment may cause noise or degradation of the picture. Such noise may be particularly noticeable when an indoor antenna is used. In such a case, make use of an outdoor antenna, or turn off power to the unit.

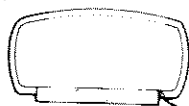
BEFORE OPERATING

1

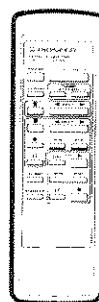
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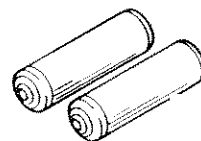
(2)



(3)



(4)



CONFIRM SUPPLIED ACCESSORIES

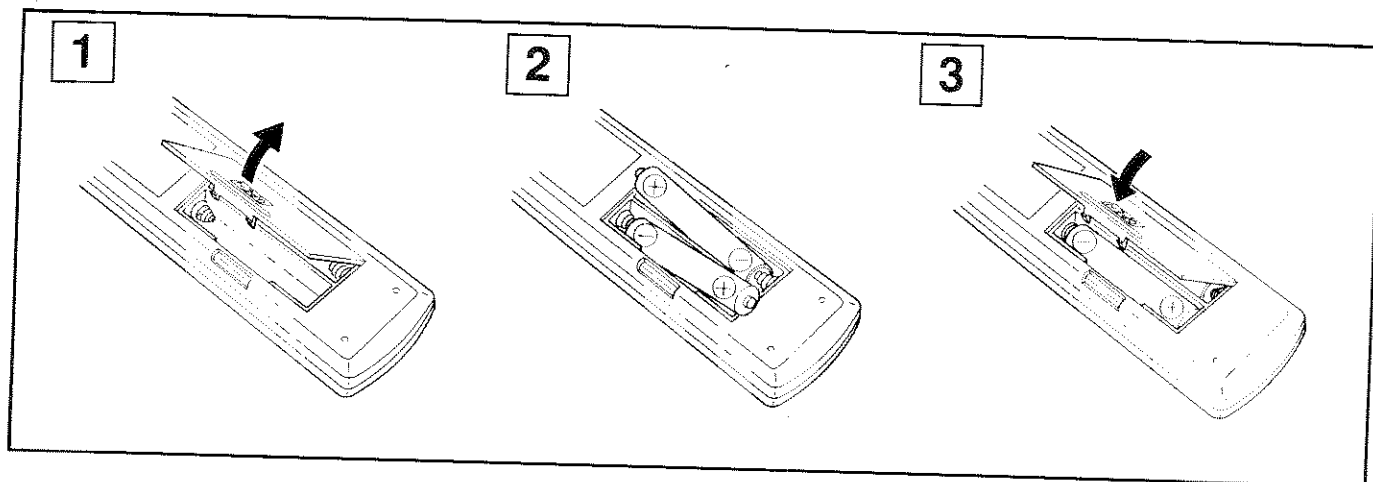
See Fig 1(f).

- (1) FM antenna (F-Z94)
- (2) AM loop antenna (F-Z94)
- (3) Remote control unit (DC-Z74)
- (4) Batteries (R03/UM-4) (DC-Z74)

CONDENSATION

- When the unit is brought into a warm room from previously cold conditions or when the room temperature is suddenly increased, condensation may form inside and the unit may not be able to attain its full performance. In cases like this, allow the unit to stand for about an hour or raise the room temperature gradually.

LOADING BATTERIES INTO REMOTE CONTROL UNIT

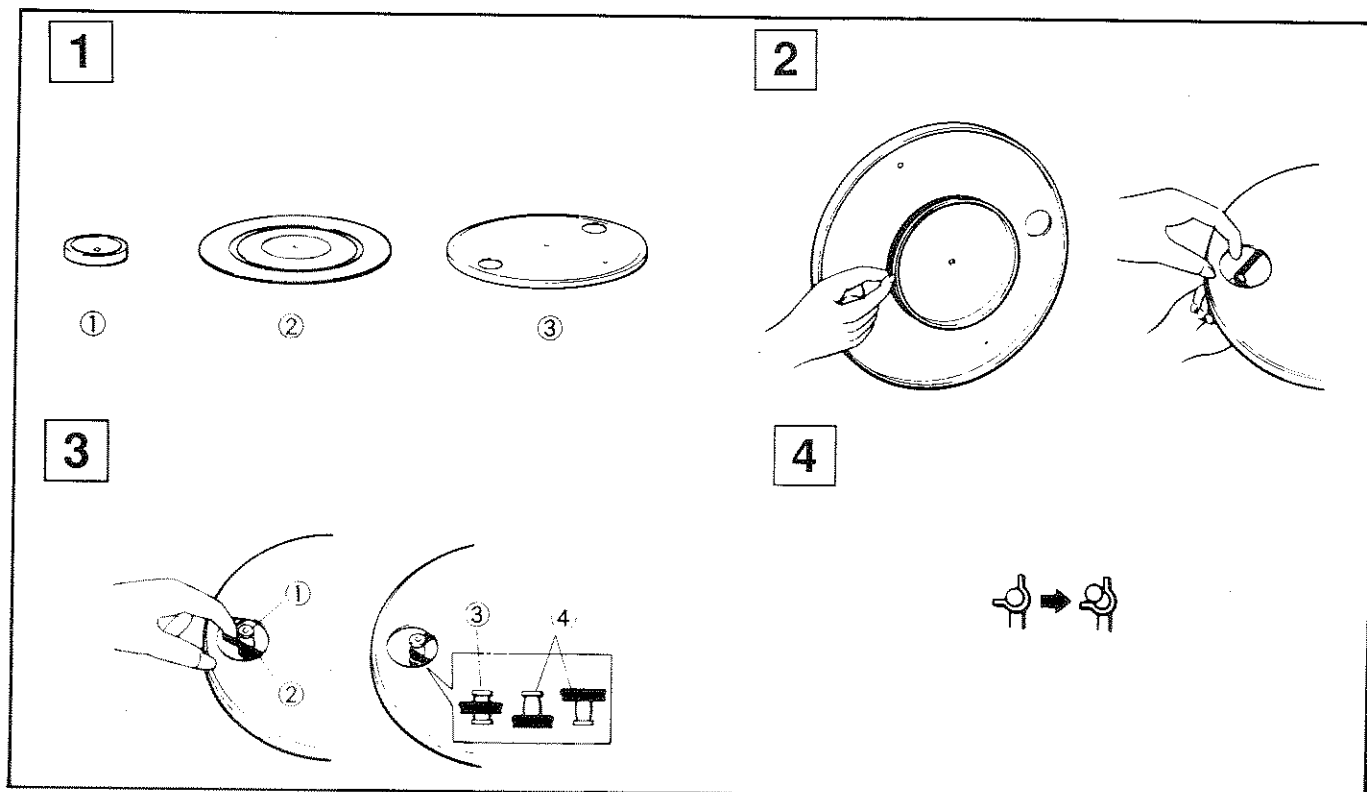


- 1** Open the rear cover.
- 2** Install size "AAA" (IEC R03/UM-4) batteries correctly matching polarity.
- 3** Close the cover.

Incorrect use of batteries may lead to leakage or rupture. Always be sure to follow these guidelines:

- A:** Always insert batteries into the battery compartment correctly matching the positive + and negative - polarities, as indicated inside the compartment.
- B:** Never mix new and used batteries.
- C:** Batteries of the same size may have different voltages, depending on their type. Do not mix different types of batteries.

PL-Z94 TURNTABLE SET UP



1. Check the parts.

See Fig [1].

- ① EP adaptor (You will find this taped on the cabinet)
- ② Platter mat
- ③ Platter

2. Pinch belt on inner rim between thumb and forefinger.

See Fig [2].

- 3. Slip belt over finger and pull out, inserting finger in hole.
- 4. Insert finger from top of platter and transfer belt to forefinger.
- 5. Lower platter onto spindle.

6. Release belt onto pulley.

See Fig [3].

- ① Pulley
- ② Belt
- ③ Correct
- ④ Incorrect

7. Place platter mat on platter (with "PIONEER" side up).

8. Remove the vinyl band holding the tonearm.

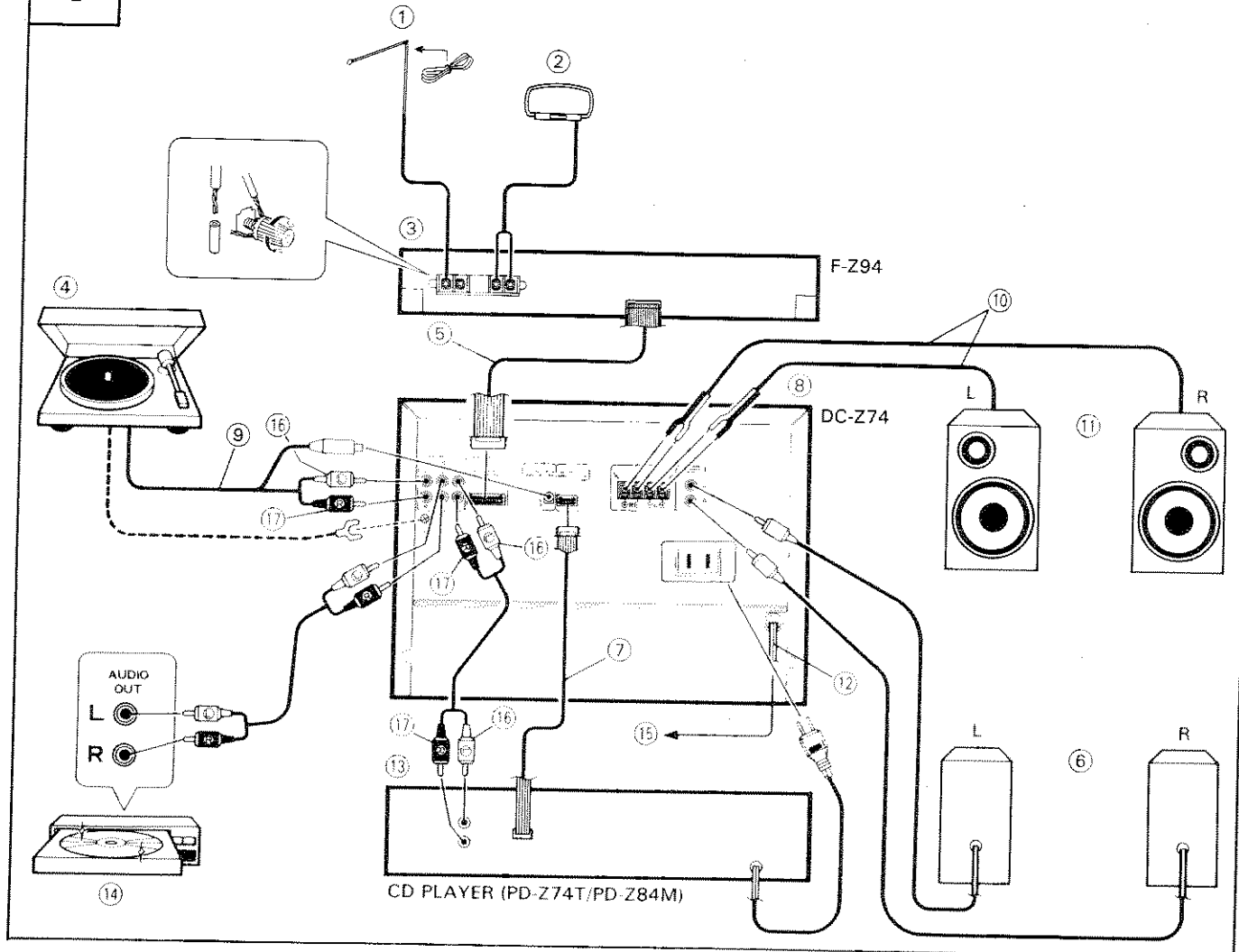
9. Remove the stylus cover.

10. Remove the tonearm from the arm rest.

See Fig [4].

CONNECTIONS

1



See Fig. [1].

- ① Accessory FM antenna
- ② Accessory AM loop antenna
- ③ FM/AM tuner (F-Z94)
- ④ Turntable (PL-Z94, etc.)
- ⑤ Tuner input/output cord
- ⑥ Surround speaker system
- ⑦ CD player flat cable
- ⑧ Stereo double cassette deck amplifier
- ⑨ Turntable connection cord

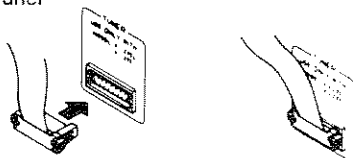
- ⑩ Speakers cord
- ⑪ Speaker system
- ⑫ Power cord
- ⑬ CD player (separately sold PD-Z74T or PD-Z84M)
- ⑭ LD player or video cassette recorder (VCR)
- ⑮ To the AC wall socket
- ⑯ White
- ⑰ Red

NOTE:

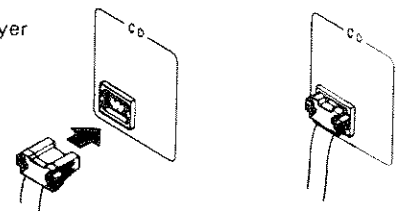
Do not place the PL-Z94 directly on the DC-Z74.

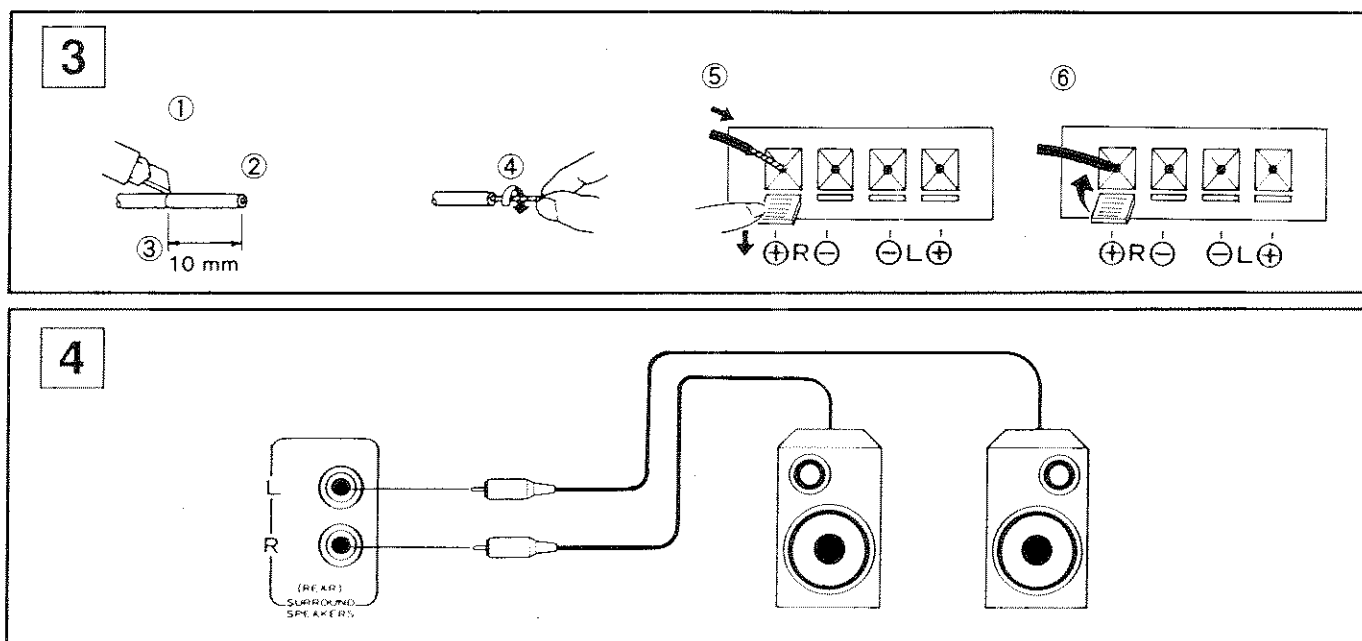
2

Tuner



CD player





Plug the power cord into the household electrical outlet only after all the connections have been completed.

Proceed as follows with the set-up and connections.

1. Place the cassette deck amplifier on top of the CD player.
2. Connect the CD player OUTPUT jacks to the cassette deck amplifier CD INPUT jacks with audio cords.
If using this unit together with the optional CD player PD-Z74T or PD-Z84M, connect the flat cable 7.
3. Place the tuner on top of the cassette deck amplifier.
4. Connect the tuner input/output cord (5) to cassette deck amplifier.

TUNER AND CD PLAYER CONNECTIONS (Diagram 2)

Insert the connector until it locks, thus ensuring that it is connected. When disconnecting the connector, pull it in the opposite direction while pressing the left and right claws.

BEFORE CONNECTING THE CONNECTION CORD, SWITCH OFF THE DECK AMPLIFIER, THEN PUSH IN THE PLUG OF THE CORD FIRMLY UNTIL IT LOCKED INTO PLACE.

5. Connect the FM antenna (1) and the AM loop antenna (2) to the tuner's antenna terminals.
6. Place the turntable on top of the tuner.
7. Connect the turntable connection cords (9) to the CD cassette deck amplifier's jacks.
If using the turntable PL-Z94, connect the turntable's audio cords and power supply cord respectively to the CD cassette deck amplifier's PHONO jacks and DC 12V OUTPUT jack.
If using a different turntable, connect its audio cord and ground cord in the PHONO jack and the ground terminal, respectively.
8. Use the "LD/VCR" jacks for connection to the audio jacks of an LD player or VCR.

NOTE:

- Insert the plugs securely into the jacks. Improper connection can lead to sound distortion or malfunction.
- The white plug is for the left channel connection and the red plug for the right channel connection.
- When connecting or disconnecting the input/output cord, do so only after disconnecting the power plug from the wall socket.

9. Connect the speaker cords (10) to the SPEAKERS terminals.
Connect the "+" terminals on the CD cassette deck amplifier to the "+" terminals on the speakers, the "-" terminals on the CD cassette deck amplifier to the "-" terminals on the speakers.

Connecting the speaker cords.

See Fig 3.

- | | |
|-----------------|-----------------------|
| 1. Cutter | 4. Twist the strands. |
| 2. Speaker cord | 5. Push away. |
| 3. 10 mm | 6. Pull back. |

NOTE:

Do not allow the conductors of the cords to project out of the terminals or to come into contact with other conductors. A breakdown or failure may occur when conductors touch.

Speaker impedance

[Multi-voltage model]

Connect speaker systems with a nominal impedance of between 6 and 16 Ω .

[Australian model]

Connect speaker systems with a nominal impedance of between 8 and 16 Ω .

Surround speaker connection

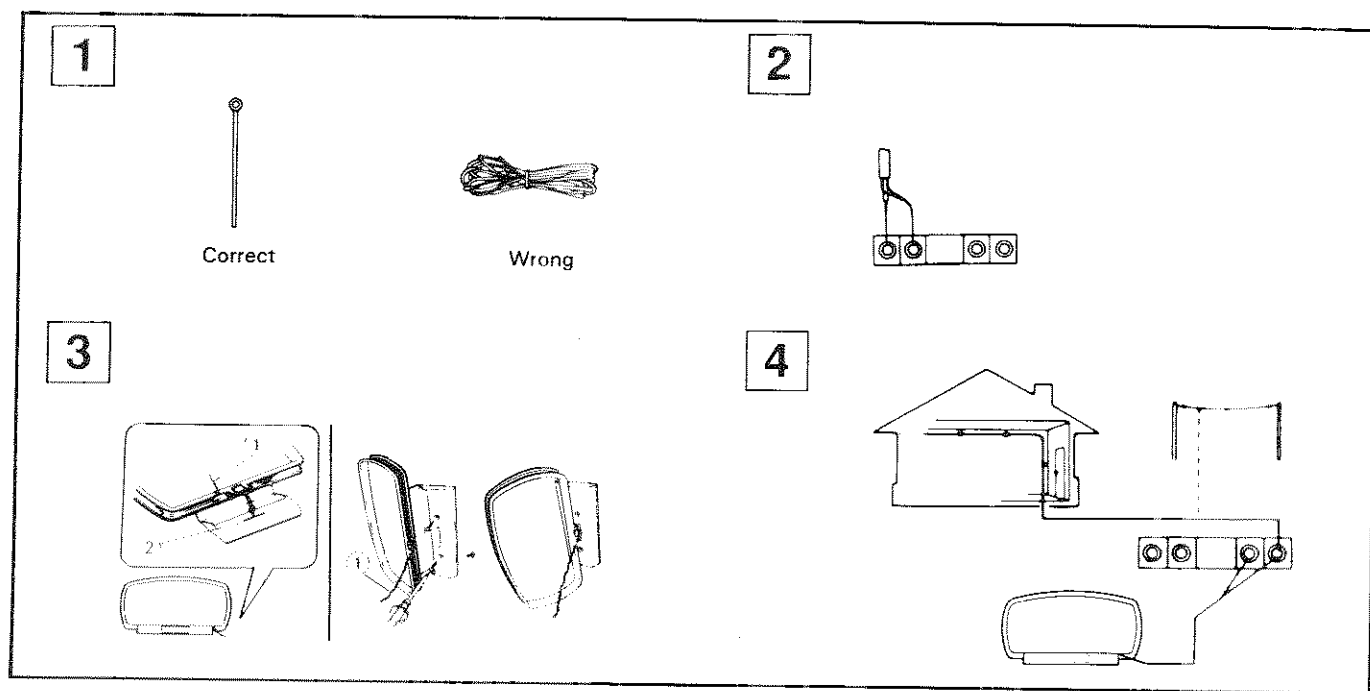
See Fig 4.

Connect the plugs properly.

Connect a speaker system with a nominal impedance of 16 Ω or more.

10. Connect the CD player's power cord to the deck amplifier's AC OUTLET.
11. Finally, connect the power cord (12) to the AC wall socket.

ANTENNA CONNECTIONS



Radio reception is not possible unless the antenna is properly connected.

The strength of broadcast signals varies from one area to another. Signal propagation is especially poor in metropolitan areas, where there are many tall buildings, and in mountainous areas. Proper antenna installation is vital to good reception.

FM ANTENNA

FM Antenna Attachment

See Fig [1].

Connect the accessory FM antenna to the FM terminals. Stretch the antenna out to its full length, and affix it to a wall, etc.

External FM antenna installation

See Fig [2].

Use an external antenna when the signals from the station are weak and cannot be picked up by the accessory FM antenna, or when the sound heard is accompanied by large amounts of noise.

AM ANTENNA

The AM loop antenna supplied with the tuner should be connected to the AM antenna terminals. The antenna should be placed at a distance from the tuner, and should not be allowed to touch metallic objects. Avoid placing it near personal computers, television sets, and other devices generating radio frequencies.

Setting Up the AM Antenna

See Fig [3].

- Insert the clip on the bottom of the antenna into the groove on the leg.
- Place the antenna on a level surface and rotate it to locate the orientation that yields the best reception.
- Use the attachment hole in the leg to screw to a wall or other location, then insert the claw on the bottom of the antenna into the groove in the leg (fixing the antenna in the direction that gives best reception).

(1) Lead wire

(2) Leg

External AM antenna

See Fig [4].

Indoor AM antenna

Provide a vinyl-coated wire (5 to 6 meters long). Secure one end to the AM terminal and the other end to a wall or other high location.

Outdoor AM antenna

If reception is still poor even when a lead antenna has been stretched out indoors, stretch out a vinyl-coated wire and secure it outdoors.

NOTE:

Do not detach the AM loop antenna when using the external AM antenna.

ANTENNA GROUND

Although grounding is not necessary for reception, it is recommended for protection against damage from lightning for an outdoor FM antenna.

Grounding is recommended as well to help to reduce noise and hum.

NOTE:

Never make the ground connection to a gas pipe as sparks could cause the gas to ignite.

FM/AM CHANNEL SWITCH

Adjustment is only necessary when there is a CHANNEL STEP switch at the rear panel.

The CHANNEL STEP switch is located on the rear panel of the digital synthesizer tuner. Before the tuner leaves the factory, this switch is set to the channel step standard of the area where the tuner is sold. Depending on the position of this switch, each time TUNING switch is pressed, the frequency display changes by the following amount:

[100 kHz/10 kHz] position

For areas with channel step of 100 kHz for FM and 10 kHz for AM.

[50 kHz/9 kHz] position

For areas with channel step of 50 kHz for FM and 9 kHz for AM.

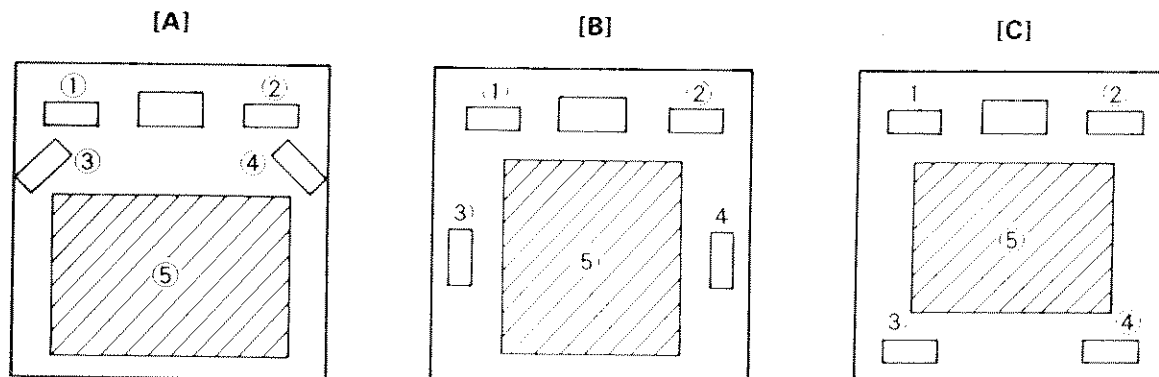
NOTE:

If the switch is set to the wrong position, correct tuning may not be possible.

Consult your dealer if you are not sure about the radio channel step standard in your area.

SURROUND SYSTEM

1



What is Surround Sound?

With ordinary stereo, sound normally comes only from speakers in front of the listener; however, in a concert hall or theater, sound reflected from the walls and ceiling reaches the listener from all directions. This accounts for the feeling of ambience or spaciousness of a live performance.

Surround sound works to reproduce these effects to produce fuller, more "live" sound.

STEREO WIDE

When the surround speakers are not connected, the stereo wide function may be activated. This function enhances the stereo effect. Note that it does not operate in the case of a monaural source, however.

Speaker System Placement Examples

See Fig [1]

The sound effects obtained in a surround system depend on speaker placement. Experiment with various arrangements to find the one most suited to your tastes.

Placing the speakers slightly higher than ear level contributes to sound quality.

- (1) Front speaker (left)
- (2) Front speaker (right)
- (3) Rear speaker (left)
- (4) Rear speaker (right)
- (5) Listening area

[Case A]

Good sound dispersion; recommended for movies, etc.

[Case B]

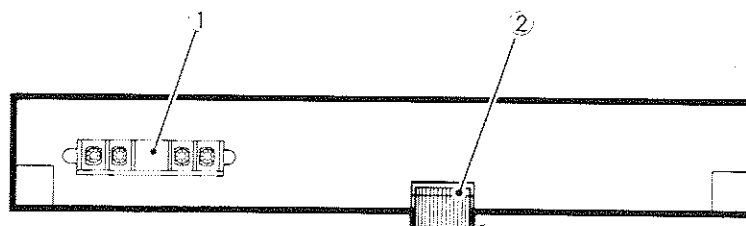
Sound appears to come from directly in front of listener; good for listening to music recordings.

[Case C]

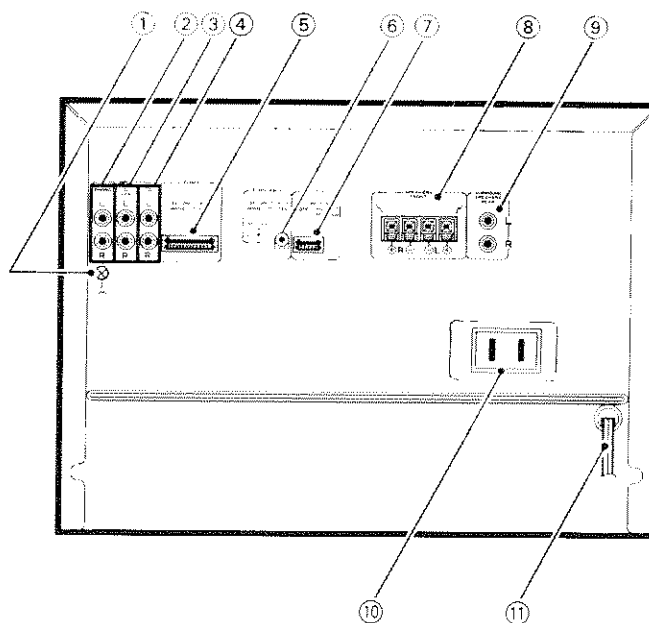
Offers most varied effects; good for watching sports programs or listening to live recordings.

ANEL FACILITIES

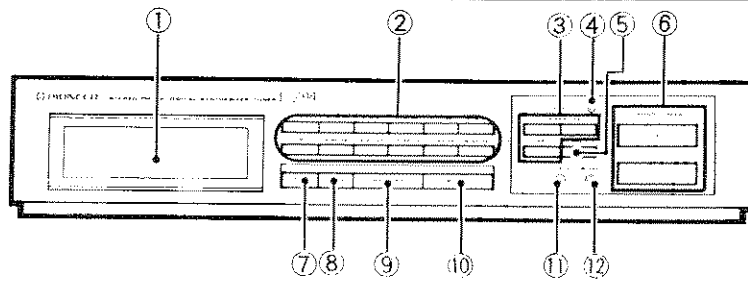
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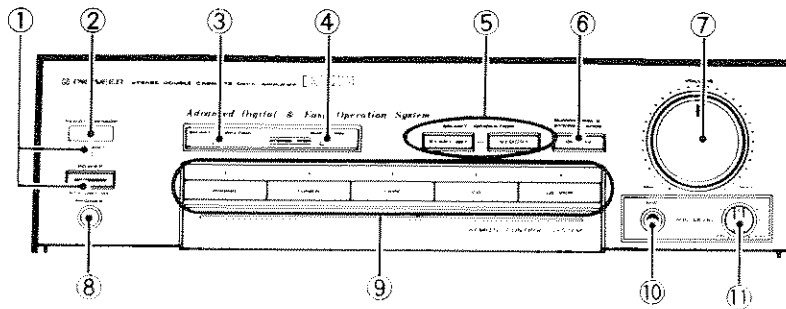
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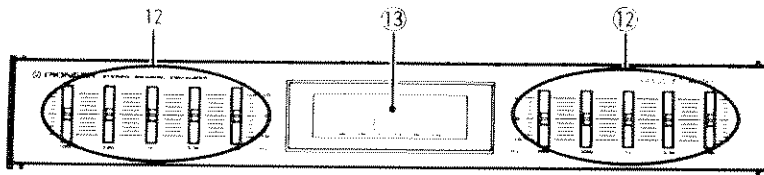
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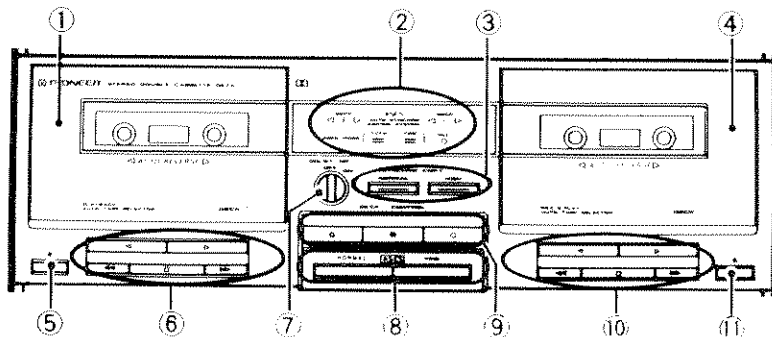
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5



6



REAR PANEL FACILITIES

Tuner: F-Z94

See Fig 1.

① FM/AM ANTENNA terminals

Antennas must be connected to these terminals; otherwise station reception is not possible, see page 8 for details on ANTENNA CONNECTIONS.

② TUNER input/output cord

Connect to the TUNER jack of the CD cassette deck amplifier.

Stereo double cassette deck amplifier: DC-Z74

See Fig 12.

① Ground terminal (GND)

Connect this to the ground terminal on the turntable (except for PL-Z94).

② PHONO input jacks

Connect the audio cord of the turntable to these jacks.

③ LD/VCR input jacks

Connect to audio output jacks of LD player or VCR, etc.

④ CD input jacks

Connect to output jacks a CD player.

⑤ TUNER jacks

Connect the tuner cord here.

⑥ TURNTABLE (DC 12 V OUTPUT) jack

This jack supplies power to the turntable PL-Z94.
Connect the power supply cord of the turntable to this jack.

⑦ CD jacks

Connect to a compact disc player PD-Z74T or PD-Z84M flat cable.

⑧ SPEAKERS terminals

L: Connect the left speaker system as seen from the listening position.

R: Connect the right speaker system as seen from the listening position.

NOTE:

[Multi-voltage model]

Connect a speaker system with a nominal impedance of between 6Ω to 16Ω

[Australian model]

Connect a speaker system with a nominal impedance of between 8Ω to 16Ω

⑨ SURROUND (Rear) SPEAKER jack

Connect the surround (rear) speaker systems.

NOTE:

Connect a speaker system with a nominal impedance of 16 Ω or more.

⑩ AC OUTLET (SWITCHED 50 W MAX)

Power supplied through this outlet is turned on and off by the cassette deck amplifier's POWER switch. Total electrical power consumption of connected equipment should not exceed 50 W.

NOTE:

Do not connect appliances with high power consumption such as heaters, irons, or television sets to the AC OUTLET in order to avoid overheating or fire hazard.

This can cause the cassette deck amplifier to malfunction.

⑪ Power cord

Connect this to the household electrical socket.

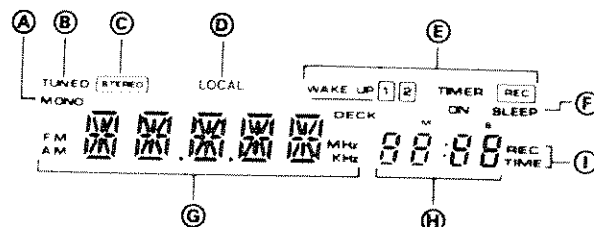
FRONT PANEL FACILITIES

Tuner: F-Z94

See Fig 13.

① Display section

Shows current time, received frequency, contents of timer settings, etc.



A MONO indicator

Lights when the MPX button is set to ON. When this indicator is lit, FM stereo broadcasts are reproduced monaurally.

B TUNED indicator

Lights when a broadcast is received and tuned in well.

C STEREO indicator

Lights when an FM stereo broadcast is received (MPX button set to OFF).

D LOCAL indicator

Light when the LOCAL button is set to ON.

E Timer indicators

These show various timer settings.

F SLEEP indicator

Indicates that the sleep timer is activated.

G Frequency display

Shows received broadcast frequency. Also gives scrolling display of main function status.

FM and MHz light: FM reception.

AM and kHz light: AM reception.

H Time display

This shows the present time. And during recording on Deck II, it shows the elapsed recording time.

I Deck II REC TIME indicator

Lights when Deck II is recording.

② STATION CALL buttons

Used for memorizing and recalling memorized stations.

③ **Timer selector buttons**

[WAKE-UP 1,2]

Used for timer playback setting.

[REC]

Used for timer recording setting.

④ **CLOCK ADJ button**

Used for starting the clock adjustment.

⑤ **SET button**

Used for current time, timer playback, and timer recording setting.

⑥ **TUNING/TIMER (–, +) buttons**

[During tuning]

Used for locating stations.

Use “–” button for lower, and “+” button for higher frequencies.

[During time and timer setting]

Used for adjusting the clock, timer settings and its related adjustments.

⑦ **LOCAL button (when receiving FM broadcasts)**

Use this if the broadcast signal is too strong, causing noise and distortion. The attenuator reduces the strength of the signal, reducing noise and distortion.

⑧ **MPX (FM MONO) button**

Turn on when there is much noise during reception of FM stereo broadcasts. The reproduced sound will become monaural but noise will be reduced.

⑨ **MEMORY button**

Used for memorizing stations. When the button is pressed, the frequency display will flash. To memorize the frequency of any station, press a station call button while the frequency display is flashing.

⑩ **BAND selector button**

Each time this button is pressed, FM, AM reception is selected in order.

⑪ **CHECK button**

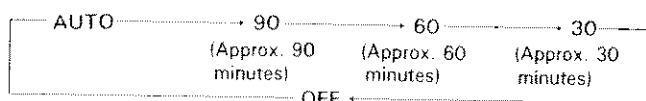
Used for confirming timer settings, after setting for timer playback or timer recording.

⑫ **SLEEP button**

Sets the sleep timer.

Each time you press this button, the setting changes as shown here. The current setting is shown on the tuner display.

Power turns off when your set time has elapsed.



If you press the SLEEP button during recording, AUTO is displayed, and when recording is finished, the power goes off.

Stereo double cassette deck amplifier: DC-Z74

- Tapes can be played back on Deck I; tapes can be played back and recorded on Deck II.
- Sound can be recorded as adjusted by the graphic equalizer (excluding synchro copy).

■ **Amplifier section/Graphic equalizer section**

See Fig ④, ⑤.

① **POWER STANDBY/ON button/indicator**

This is the button for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.

The tuner section display indicates only the time. The STANDBY indicator lights when the power is STANDBY, and goes out during ON.

② **REMOTE SENSOR window**

③ **SMART OPERATION indicator**

Blinks when the SMART OPERATION mode is set to ON.

④ **SURROUND indicator**

Lights when the SURROUND & STEREO WIDE is set to ON.

⑤ **SMART OPERATION buttons**

[START/SET]

To operate the SMART OPERATION function and set the data.

[MEMORY]

To set the data for SMART OPERATION.

⑥ **SURROUND & STEREO WIDE button**

In ON position, you can enjoy SURROUND sound reproduction when the rear speakers are used.

In ON position, when the rear speakers are not used, you can enjoy STEREO WIDE sound reproduction with wider left-right spread.

NOTE:

SURROUND & STEREO WIDE effects cannot be obtained with a monaural signal source.

⑦ **VOLUME control**

⑧ **PHONES (Headphone) jack**

For stereo headphones.

NOTE:

There is no speaker output when headphones are plugged into the PHONES jack.

⑨ Input selector buttons/indicators

- [PHONO]** Press to play records on a turntable connected to the PHONO jacks.
- [TUNER]** Press to listen to radio broadcast.
- [TAPE]** Press to listen to cassette tape.
- [CD]** Press to listen to a compact disc.
- [LD/VCR]** Press to listen to stereo component connected to the LD/VCR jacks.

⑩ MIC (microphone) jack

This is a standard jack for connecting a microphone.

⑪ MIC LEVEL control

Used for adjusting the volume of microphone.

⑫ Graphic equalizer controls

Fine adjustments in sound quality are possible using the 5 controls on the graphic equalizer.

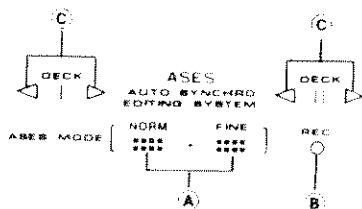
⑬ DISPLAY section

■ Cassette Deck Section

See Fig [6].

① DECK I cassette door

② Operation indicators



- A ASES (NORM, FINE):** Lights when the A.S.E.S. (Auto Synchro Editing System) is operating.
- B REC:** Lights when recording. Flashes when copying a tape.
Slow flashing = Normal copy
Rapid flashing = High speed copy
- C Direction (<, >):** Shows direction of tape travel.

③ SYNCHRO COPY buttons

Used for tape copying.

- NORMAL:** Copying from the Deck I tape to the Deck II tape at normal recording/playback speed.
- HIGH:** Copying at about twice normal tape speed. (Copies can be made in about half the NORMAL time.)

④ DECK II cassette door

⑤ Deck I eject button

⑥ Deck I Operation buttons

- ▶ PLAY (FWD)** For playing back a tape in the forward mode.
- <▶ PLAY (REV)** For playing back a tape in the reverse mode.
- STOP** For stopping the tape.
- ▶▶ FAST** Fast forward in forward mode, rewind in reverse mode.
- <<< FAST** Rewind in forward mode, fast forward in reverse mode.

⑦ DOLBY* NR switch

Set this switch to the ON position to activate the DOLBY NR system.

- Tapes recorded using Dolby noise reduction should always be played back with the noise reduction system on. Sound quality will be adversely affected if played back with the system off, or if tapes recorded using a different noise reduction system are played back with the Dolby NR system on.
- It is recommended that tapes recorded with Dolby B type NR be so marked on the label. This will help prevent incorrect setting of the noise reduction button during playback.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

⑧ ASES (NORMAL, FINE) button

Used for automatically recording a CD on cassette tape. (See page 22)

⑨ DECK II CONTROL buttons

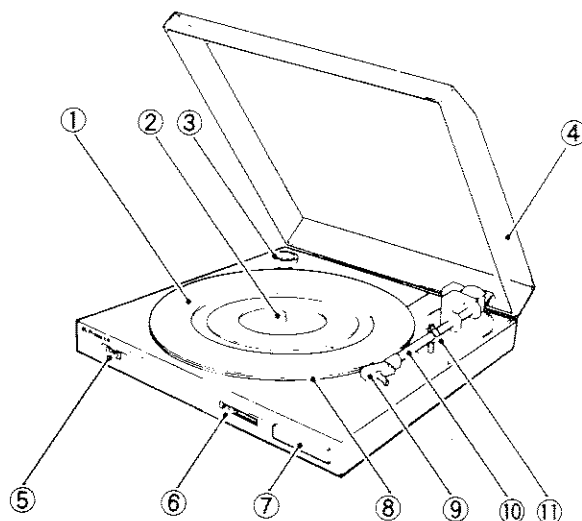
- REC MUTE (○)** Used for creating a blank space between songs. Pressing this button once creates an unrecorded 4-second space.
The unrecorded space is created for as long as this button is kept pressed during recording.
- PAUSE (□)** Temporarily stops tape travel. Cancels pause mode when pressed again.
- REC (●)** To set to recording standby mode. Recording begins when you press the PLAY button (<▶ or ▶).

⑩ Deck II Operation buttons:

Same as Deck I operation buttons (6).

⑪ Deck II eject button

7



Turntable: PL-Z94

See Fig [7].

① **Platter mat**

② **Platter spindle**

③ **EP adaptor**

Place over the spindle to play 45-rpm singles.

④ **Dust cover**

⑤ **SPEED switch**

Set this switch in accordance with the speed of the record.

33: For 33-1/3 rpm records.

45: For 45 rpm records.

⑥ **ARM-ELEVATION switch**

- To suspend record play temporarily.
- For changing the tracks during actual play.

[UP]: The tonearm rises (the stylus moves away from the record).

[DOWN]: The tonearm descends (the stylus is lowered onto the record).

⑦ **STOP button (□)**

Press this button to stop play.

⑧ **Platter**

⑨ **Cartridge**

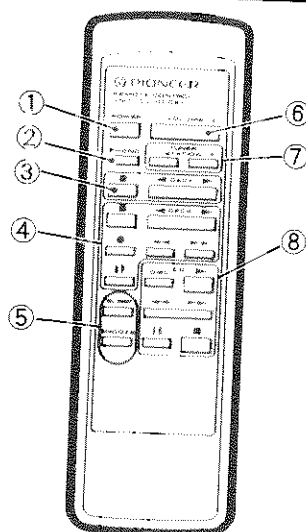
⑩ **Tonearm**

⑪ **Arm rest**

NOTE:

Do not place the PL-Z94 directly on the DC-Z74.

8



Remote control unit

See Fig. 8.

(1) POWER button

(2) PHONO button

Sets function to PHONO.

(3) Deck I operation buttons

- ▶ Forward play
- ◀ Reverse play
- Stop

(4) DECK II operation buttons

Same as Deck II operation buttons and DECK II CONTROL buttons on the CD cassette deck amplifier (Except for REC MUTE) (page 14).

(5) Timer operation buttons

SLEEP: Sets the sleep timer.

SNOOZE: Turns off power if pressed after timer playback begins. Timer playback begins again approx. 5 minutes later.

(6) VOLUME + (UP)/- (DOWN) buttons

When pressed, VOLUME on the amplifier is actually moved by a motor.

(7) TUNER STATION buttons

- Before operation, memorize broadcast stations in the STATION CALL buttons.
- + ... Stations change in order in the upward direction.
- Stations change in order in the downward direction.

(8) CD operation buttons

- ▶ Play
- DISC DISC selection
- Stop
- ⏸ Pause
- ◀▶ Track search

NOTE:

Note that the DISC selection button on the remote control unit may not operate, depending on the CD player used.

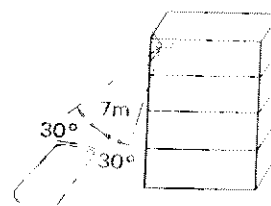
The amplifier input selector automatically switches to the music source being operated when you press the CD playback (▶), cassette deck playback (◀▶), or tuner station controls.

NOTE:

It is not possible to operate the CD player with the remote control unless the CD flat cable connected.

Range of remote control

Remote sensor window



When the remote control unit is pointed at the remote sensor window on the amplifier and any of its buttons is pressed, the tuner and other components can be operated by remote control.

Distance: Within a range of approx. 7 meters from the remote sensor window.

Angle: Within approx. 30 degrees from the center of the remote sensor window.

Remote control will not be possible if there is an obstacle between the remote control unit itself and the remote sensor window.

Performance of the remote control unit is adversely affected by strong fluorescent light. Keep such lights away, especially from the sensor window.

HOW TO HANDLE CASSETTE TAPES

Bear in mind the following points before loading cassette tapes.

Is the tape loose, or is some of the tape outside the cassette?

If some of the tape is projecting outside the cassette shell or if it is loose, it may not feed between the capstan and pinch roller. This will prevent the tape from being transported or damage the tape itself. In cases like these, insert a pencil into the reel hole and take up the slack. (Fig [1]) Some cassette tapes come with a plastic or thick paper stopper which prevents tape slack. Remove this stopper when loading the tape and replace it after having used the cassette.

How can you prevent accidental erasure?

A cassette is provided with accidental erasure prevention tabs so that important recordings will not be erased accidentally. When the tab (Fig [2]) on the cassette shell is broken out with the tip of a screwdriver, it will not be possible to activate the recording function even by pressing the recording (REC) button, so valuable recordings will not be erased in error.

To re-record on a cassette whose tabs have been broken out, simply stick a piece of doubled adhesive tape over the tab areas, as shown in Fig [3].

NOTE:

The accidental erasure prevention tabs are located at the top left on both sides A and B (1 and 2), so that material on each side can be prevented from being erased in error.

Tips on using cassette tapes

- Leader tape (which does not allow sound to be recorded over it) is provided at the beginning of a cassette tape. Start recording after allowing the tape to run for approx. 5 seconds so that the leader tape clears the recording head.
- Do not leave a cassette tape exposed to the environment. Store the cassette in its case so that dust and dirt do not adhere to the tape after use, and so that the tape is prevented from becoming slack.
- Choose a location which is not exposed to the effects of magnetism, dust, dirt and oil for storing the tapes.
- Because C-120 tapes are so thin, they easily jam in the pinch roller and capstan, and they are susceptible to other problems such as irregular winding. Try not to use them with this unit. Use tapes of 90 minutes or less.

Fig. [1]

How to take up tape slack.

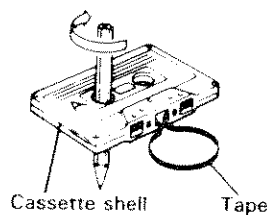


Fig. [2]

How to prevent already recorded tapes from being erased

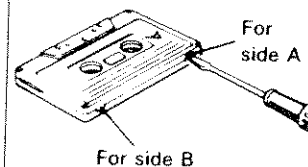
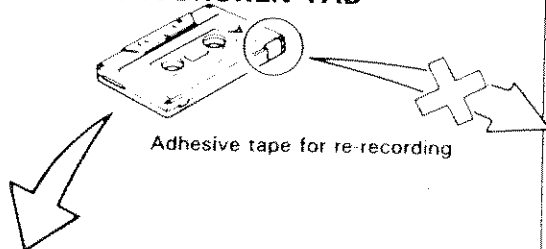


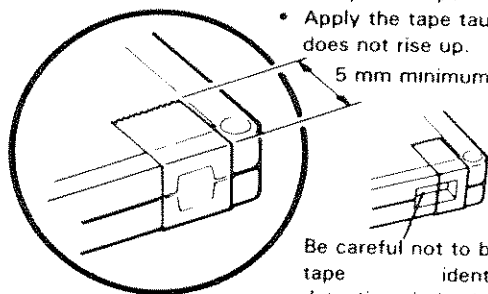
Fig. [3]

NOTE FOR RE-RECORDING ON A CASSETTE TAPE WHICH HAS A BROKEN TAB



CORRECT METHOD OF APPLYING TAPE

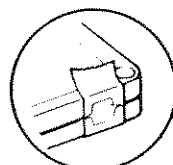
- Apply two layers of cellophane tape.
- Apply the tape taut so that it does not rise up.



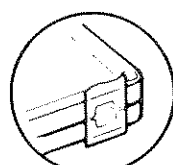
Be careful not to block the tape identification detection hole (chrome tape).

INCORRECT METHOD OF APPLYING TAPE

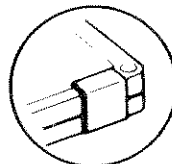
THIS MAY RESULT IN AN ACCIDENT



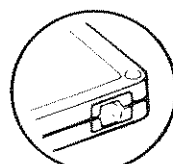
Curled tape



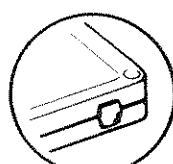
Protruding tape



Applying vinyl tape, gum tape, or other tape apart from cellophane tape.



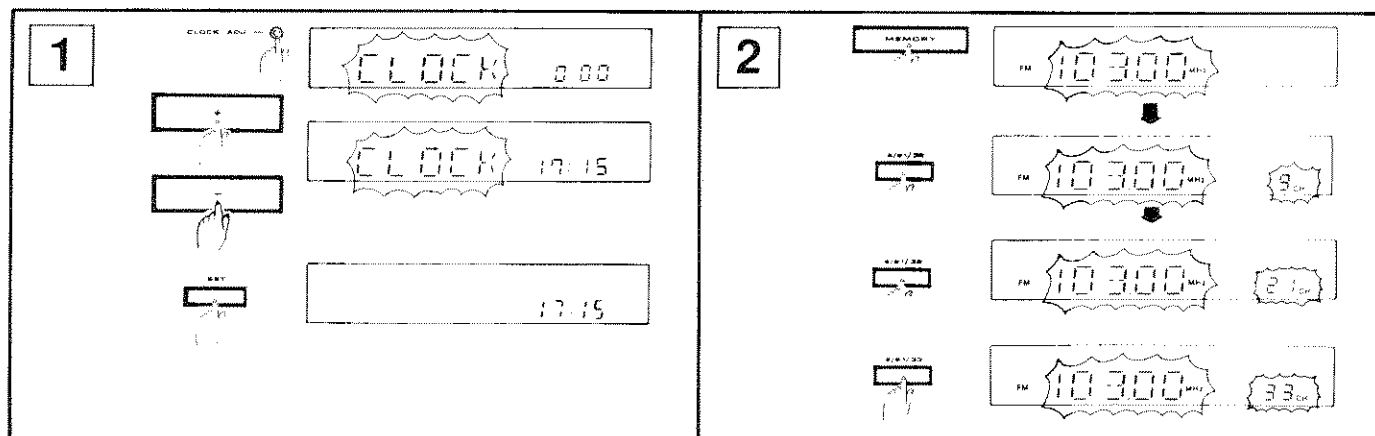
Applying top portion only.



Insertion of an eraser or the like.

After removing the cellophane tape, completely wipe away all traces of paste. Use only alcohol.

BASIC OPERATIONS



SETTING THE CLOCK

(Tuner operation)

[Example] Setting the time to 17:15.

See Fig [1].

1. Press **CLOCK ADJ** button.
2. Use **TUNING/TIMER** "—" and "+" buttons to set the hour and minutes.
3. Press **SET** button when "00" seconds of that minute are reached for precise adjustment.

- After connecting to an AC outlet, be sure to set the present time. Timer playback and timer recording are not possible unless the time has been set.
- The time indication will appear as "----" if the AC power cord is unplugged. Be sure to set the time again after power is resumed.

PREPARATION

Push **POWER** button of the cassette deck amplifier.
Select an input selector button.

AUTO FUNCTION

When DC-Z74 and F-Z94 are used together.

This model is equipped with "auto function" operation, so when the button for playing CD, tape, or tuner is pressed, the amplifier's function switches automatically.

Use input selector buttons for PHONO and LD/VCR source selection since Auto Function is not effective for these.

NOTE:

Input selectors cannot be switched during recording. (Auto function also does not operate during recording.)

TUNER OPERATIONS

TUNING INTO STATIONS

(Tuner operation)

1. Select the desired broadcasting band using **BAND** selector button.
2. Press **TUNING/TIMER** "+" or "—" button for higher or lower frequencies.

[Auto tuning]

Press **TUNING/TIMER** "—" or "+" button until the frequency starts to change, then release it.

The tuner will automatically search for a broadcasting station, and stop when one is found, and the **TUNED** indicator lights up. To search for another station, press again.

- To interrupt auto tuning, press **TUNING/TIMER** "—" or "+" button again.

NOTE:

When auto tuning is in use, reception may not be possible for distant stations or when signals are weak. At these times manual tuning is recommended.

[Manual tuning]

Press **TUNING/TIMER** "—" , "+" buttons and release quickly.

The tuning frequency will change by one step each time the button is pressed. Press as many times as necessary to tune in the desired station. The **TUNED** indicator lights up when the station is tuned in best.

- If you keep the "—" , "+" buttons pressed after the frequency has begun to change, the reception frequency changes continuously, and stops when the button is released.

3. Adjust **VOLUME** control on the amplifier and the tone with the graphic equalizer controls.

FM STEREO/MONO receiving

When receiving an FM Stereo signal, the **STEREO** indicator will light, if the **MPX** button is set to OFF (the **MONO** indicator is OFF).

If the FM reception is weak or noisy because of interference, press the **MPX** button to light the **FM MONO** indicator. The noise will decrease, although the broadcast is now received in monaural.

LOCAL indicator

If the broadcast station is very near, the FM broadcast signal may be too strong, resulting in noise and distortion. In this case, press the **LOCAL** button; the **LOCAL** indicator lights.

MEMORIZING STATIONS

(Tuner operation)

See Fig 12.

Up to 36 FM/AM stations can be memorized at random. Press a STATION CALL button once for Mode 1 (1 – 12), twice for Mode 2 (13 – 24) and three times for Mode 3 (25 – 36).

1. **Tune in desired station.**
If the station is FM, then the current FM MONO on/off and LOCAL on/off settings are included in the memory.
2. **Press MEMORY button.**
 - The display will flash (approx. 5 seconds).
3. **Press STATION CALL button.**
 - While the display is flashing, press a STATION CALL button into which you wish to memorize the station.
 - One press selects the 1 – 12 (Mode 1), two presses 13 – 24 (Mode 2) and three presses 25 – 36 (Mode 3).

[Example] If you press button "9/21/33"

Once — STATION 9

Twice — STATION 21

Three times — STATION 33

NOTE:

If the same STATION CALL button is pressed within 2 seconds, the station number will change in the sequence of Mode 1, Mode 2 and Mode 3.

→ Mode 1 → Mode 2 → Mode 3
(1-12) (13-24) (25-36)
press within approx. 2 sec.

NOTE:

After you press the STATION CALL button, the display will flash for approx. 2 seconds, then the station will be memorized. If you press another button while the display is flashing, the station will not be memorized.

RECEPTION USING PRESET TUNING

(Tuner operation)

1. **Press STATION CALL button into which the desired station is memorized.**
Press once for Mode 1 stations, twice for Mode 2 and three times for Mode 3.

NOTE:

- The contents of the STATION CALL buttons will be preserved for several days, even if the CD cassette deck amplifier's power cord is unplugged. If a memorized station has been erased, memorize it again.

Last station memory

The last received AM and FM stations remain stored despite input selector and/or POWER switching. To recall, use BAND selector button.

CASSETTE DECK OPERATIONS

TAPE PLAY

(Cassette deck operation)

Tapes may be played back in Deck I or Deck II but not in both decks at the same time.

1. **Press EJECT button, and load a recorded tape.**
2. **Set the DOLBY NR switch to the same position used for recording.**
3. **Press PLAY button (▶ or ◀).**
Press PLAY button of the loaded deck.
4. **Adjust VOLUME control on the amplifier and the tone with the graphic equalizer controls.**
5. **To stop playback, press STOP button (■).**

Auto Stop Mechanism

The mechanism stops automatically when the end of tape is reached.

NOTE:

When the PLAY button of one deck is pressed while the other deck is in playback mode, the former stops and the latter starts playback.

RECORDING ONTO A CASSETTE TAPE

(Cassette deck operation)

Use the normal tape or chrome tape.

Material can be recorded on Deck II only. Recording is not possible on Deck I. You can make a recording of a source which has passed through the graphic equalizer.

As this unit has an integrated auto-reverse tape system, tracks will be automatically recorded on Sides A and B of a tape.

To record only one side, perform recording in the REVERSE mode (◀). (However, this does not function when copying tapes.) An alternative is to remove the erasure prevention tab of the side not to be recorded.

This unit has a built-in automatic level control which dispenses with the need to adjust the recording level.

1. **Press EJECT button, and load the tape for recording into Deck II.**
Check to see that the accidental erasure prevention tabs are not broken off.
2. **Set DOLBY NR switch to the desired position.**
 - A tape which has been recorded using the DOLBY NR system must be played back with the same system.
3. **Use input selector button on the amplifier to select and play the recording source.**

Program source	Selected indicator	Operation
Record	PHONO	Operate the turntable
Radio broadcast	TUNER	Tune into a broadcast
Tape	TAPE	Play a tape in Deck I
Compact disc	CD	Play a compact disc
Equipment which is connected to LD/VCR jacks	LD/VCR	Operate the equipment connected to LD/VCR jacks

4. Adjust the graphic equalizer controls to change the sound quality for recording.
5. Press REC button (●).
 - The REC indicator lights.
 - The direction indicator flashes.
6. Press the appropriate PLAY button (▷ or ◁).
7. To stop recording, press STOP button (□).

Auto reverse function

This unit uses rotary type recording and playback heads, and the same heads are used in both forward and reverse directions. Tape-end detection is employed to activate auto reverse operation which takes approx. 2 seconds after the tape is taken up.

NOTE:

A leader tape with a length equivalent to approx. 5 seconds is attached to an ordinary cassette tape. This means that for two-way travel of the leader tape there will be a break of approx. 12 seconds in the sound. Be very careful of this, particularly when making a two-way recording.

Pausing and restarting recording

1. Press PAUSE button (⏏).
 - Recording will be suspended.
2. To restart recording, press PAUSE button (⏏) or PLAY button (▷ or ◁).

Recording muting

Use this function to create the 4 seconds blanks.

- Press MUTE button (⏏) during recording, and the unit will stop recording sound on the tape for about 4 seconds and will enter the recording pause mode.
- To create a blank more than 4-seconds long, hold the button down for the desired time. The unit will enter recording pause mode when you release the switch.
- To resume recording, press PAUSE button (⏏).

TURNTABLE OPERATIONS

RECORD PLAY (Turntable PL-Z94)

1. Set input selector button on the amplifier to PHONO.
2. Place record on the platter mat.
3. Remove the stylus cover and release the tonearm from the arm rest.
4. Set SPEED switch.
5. Move ARM-ELEVATION switch to UP position.
6. Move the tonearm by hand to the desired position over the record.
7. Move ARM-ELEVATION switch to DOWN position.
 - The tonearm descends onto the record and playback starts.
8. Adjust VOLUME control on the amplifier and the tone with the graphic equalizer controls.
9. To stop the player while a record is being played, press STOP button.

PLAYING THE COMPONENTS CONNECTED TO THE LD/VCR JACKS

1. Set input selector button on the amplifier to LD/VCR.
2. Play the component connected to LD/VCR jacks.

20

<ARB1278>

GRAPHIC EQUALIZER CONTROLS

The tone for the left (L) and right (R) audio channels can be adjusted separately with this graphic equalizer.

The advantage of the graphic equalizer over conventional tone controls is that with the five controls of the graphic equalizer you can control five different narrow frequency bands. With conventional tone controls a setting for a bass or treble boost or cut will also affect the lower or upper mid frequencies. The frequency bands controlled by the five side controls have been chosen to yield the maximum possible control within the audio spectrum.

- 100 Hz:** The 100 Hz control is very useful in enhancing low bass notes as in organ music.
- 330 Hz:** The 330 Hz control will allow you to vary the upper bass frequencies.
- 1 kHz:** The 1 kHz control is the presence control and can be used very effectively to emphasize or de-emphasize vocalists.
- 3.3 kHz:** The 3.3 kHz control will add brilliance and clarity to brass instruments and violins.
- 10 kHz:** The 10 kHz control can be used to make up for missing high frequencies absorbed by the environment and to add a natural crispness to music.

STORING YOUR USUAL LISTENING SETTINGS (SMART OPERATION)

This function recalls your usual listening settings (usual operation button and knob settings) at the touch of a button. When the START/SET button is pressed, the system searches for the sound source and automatically starts playback.

HOW TO OPERATE

Press the START/SET button of the SMART OPERATION function. The CD will be played back.

If no disc has been inserted:



Plays back the tape in Deck I.

If no tape has been set in Deck I:



Plays back the tape in Deck II.

If no tape has been set in Deck II:



Selects a tuner sound source.

If the TUNED indicator does not light at the frequency of reception:



The function becomes CD.

CASSETTE DECK APPLICATION GUIDE

PROGRAMMING THE SETTING

1. Select the appropriate settings to be stored.
2. Press the **MEMORY** button. The **SMART OPERATION** indicator will blink.
3. Press the **START/SET** button within 5 seconds.
4. The **SMART OPERATION** indicator will go off.

RECALLING THE STORED SETTINGS

1. Select the sound source for playback.
Insert a tape if TAPE has been set as sound source for SMART OPERATION.
Insert a CD into the tray if CD has been set as sound source for SMART OPERATION.
2. Press the **START/SET** button.
The **SMART OPERATION** indicator will blink.
If the selected sound source cannot be played back (e.g. no disc exists on the tray when a CD has been set as a sound source for playback), the system will search for the next sound source in the same manner as before.

NOTE:

If there are no sound sources to be played back at the time of setting the **SMART OPERATION** to **ON**, although **LD/VCR** or **PHONO** mode has been stored for the **SMART OPERATION**, the function will not be changed.

CASSETTE TAPE RELAY PLAYBACK

- Relay playback is repeated as follows:
Deck I forward play (▶) → Deck I reverse play (◀) → Deck II reverse play (◀) ← Deck II forward play (▶) ←
- Relay playback is repeated only 1 times.
- If there is a tape in only one of the decks, then it will be played continuously on both sides (stops upon 6 continuous playback of both sides).

1. Load the playback tapes into Deck I and Deck II.
2. Set **DOLBY NR** switch to the same position used for recording.
3. Press the appropriate **PLAY** button (▶ or ◀) on Deck I or Deck II.
4. To stop relay playback, press **STOP** button (■) of the operating deck.

COPYING TAPES

Duplicating the recorded contents of one tape onto another tape is known as tape copying. The contents of the tape in Deck I can be copied onto the tape in Deck II (but not vice versa.) Copying is not possible while either deck is operating. You cannot record a source using the graphic equalizer.

If a tape recorded with the **DOLBY NR** system is copied, the copied tape will also be recorded automatically with **DOLBY NR** system. If a tape recorded without the **DOLBY NR** system is copied, the copied tape will also be recorded automatically without the **DOLBY NR** system.

1. Load the recorded tape into Deck I and the tape for recording into Deck II.
 - Wind the tape forward past the leader to the start of the magnetic coating portion.
 - Tape copying begins from the forward direction (▶).
 - Make sure there is no tape slack.
2. To perform a normal copy while listening to playback, set input selector button on the amplifier to **TAPE** and select **DOLBY NR** switch position.

Even if input selector button is set to another position, tape copying will still proceed. The sound of the program source selected by input selector button will be heard through the speakers.

3. Press one of **SYNCHRO COPY** buttons.
NORMAL: for tape copying at normal speed while listening to it.
HIGH: for tape copying at about twice normal speed.
4. Press **STOP** button (■) on either deck to stop the copying at any time.

NOTE:

- If you are using a TV in the vicinity of the unit, noise will be recorded. Either switch off the TV or move it away from the unit.

- There is variation in actual tape length even among cassettes of the same length label (C-60, C-90, etc.). Therefore, even if the recording tape is labeled as the same length as the playback tape, it is possible for the recording tape to end first without recording all of the contents of the playback tape.

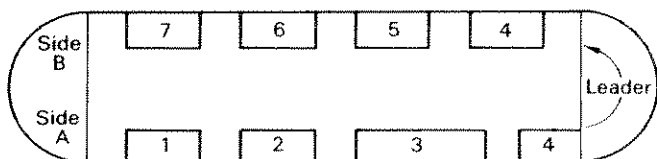
A.S.E.S. (Auto Synchro Editing System)

For automatic recording of a CD to a cassette tape.

- * The numbers indicated in the figure below are the track numbers of a CD.

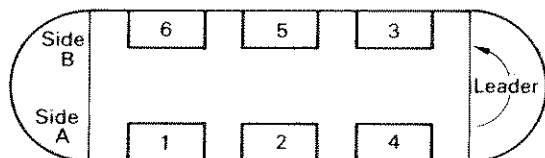
NORMAL:

If the recording is finished in the middle of a track at the end of Side A, that track will be recorded from the beginning on Side B.



FINE:

Records tracks which are selected by the CD section in the sequence of their running time, so that the blank portion at the tape end will be as short as possible, according to the tape length.



Recording will start in the forward direction (▶). When the end of this side is reached, tape direction will change and recording will continue in the reverse direction (◀).

In the A.S.E.S. mode, tracks are recorded with a blank portion of approximately 5 seconds between tracks.

- If the CD player section is operating in a programmed mode, then A.S.E.S. proceeds with the programmed song order (NORMAL).

Using the NORMAL button

1. Put disc in the CD player section.
2. Put a tape for recording into Deck II.
3. Set DOLBY NR switch to the desired position.
4. Adjust the graphic equalizer controls to change the sound quality for recording.
5. Press ASES button (NORMAL).
6. To stop A.S.E.S. operation, press STOP button (□) of Deck II or CD player.

If there is unrecorded space at the end of the tape, A.S.E.S. recording from a new CD to this empty space can be conducted (only for NORMAL).

When steps 1 to 5 have been performed, A.S.E.S. is completed.

6. Change the CD.

7. Press the PAUSE button.

The direction indicator on the running direction side blinks on the display. Recording is performed in this direction.

8. Press the ASES button (NORMAL) to start to LINK A.S.E.S.

- When the CD play duration is shorter than the duration of the tape in the LINK A.S.E.S., the A.S.E.S. is terminated in the REC PAUSE status.

When new CD needs to be recorded after this, change the CD and press the NORM button.

- Under the following conditions, A.S.E.S. terminates at the STOP mode.
 - When the CD play duration is longer than the duration of the tape.
 - When the CD is in the AUTO EJECT mode.

Using the FINE button

1. Put disc in the CD player section.
2. Put a tape for recording.
3. Set the DOLBY NR switch to the desired position.
4. Press the COMPU PGM button of the CD player.
5. Specify the recording time of the tape, using the Manual/Track search button (◀◀ ◀▶ ▶▶ ▶▶) of the CD player.

→ 46 → 54 → 60 → 74 → 90

Tape recording time will change in the above sequence whenever the button is pressed.

6. Press the COMPU PGM button of the CD player.

Tracks will be programmed so that all tracks are recorded on Sides A and B, and the result will be displayed.

Each time the TIME (CALENDAR) button is pressed, the contents programmed on Sides A and B are displayed, respectively.

7. Press the A.S.E.S. button (FINE).

8. To stop the A.S.E.S. operation, press the STOP button (□) of Deck II or CD player.

NOTE:

- A.S.E.S. performs automatic recording from CD to tape, so do not attempt to perform manual operations during A.S.E.S. operation.
- A.S.E.S. may stop or operate incorrectly when there is a song change near the end of the tape. In such cases use manual operations to record the remaining songs.
- Up to 18 songs per disc can be programmed using COMPU PGM.

SLEEP TIMER

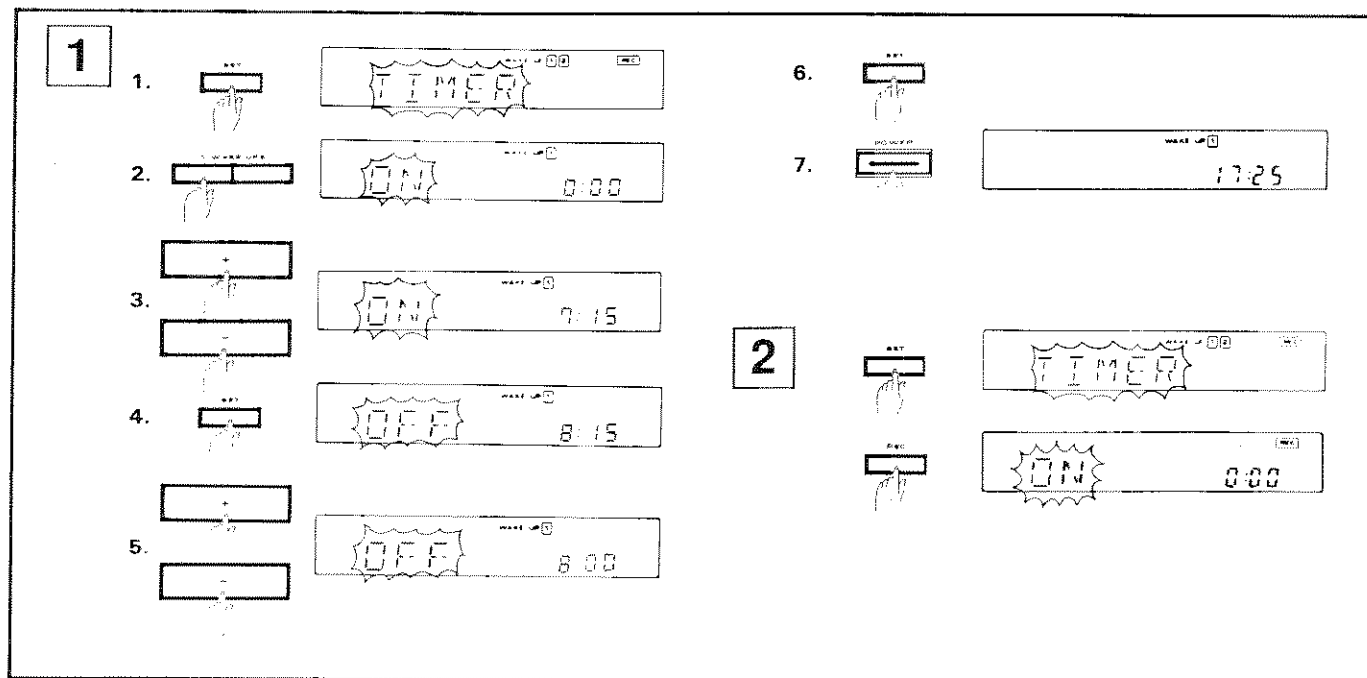
Automatically turns off power.

Power is turned off automatically after your set time has elapsed. Each time you press the SLEEP button, the setting changes in the sequence shown here.

→ AUTO → 90 → 60 → 30 → OFF
(only during recording)

When the SLEEP button is pressed during recording, the system will switch to AUTO SLEEP, automatically turning off the power after recording is completed.

TIMER PLAYBACK



- A compact disc, cassette or a radio broadcast can be used, as well as an alarm sound.
- The current sound source can be played back beginning with the time set by the TIMER function.
- Timer playback begins everyday at the same time as long as the timer playback mode is not turned off.
- To receive the desired station for TIMER PLAYBACK, set the frequency of the station to a channel and tune to that channel before setting the timer. Otherwise, "LAST" will be displayed and the station you previously listened to will be played back at the time set for TIMER PLAYBACK.

Tape playback:

- To use a tape for TIMER PLAYBACK, insert the tape into Deck.

CD playback:

- When you use a CD for TIMER PLAYBACK, the disc will be played back from the beginning.

[Timer Setting Example]

See Fig. 11

Set WAKE-UP1 for receiving FM 103.00 MHz (STATION 9) from 7:15 to 8:00.

(Follow the same steps when using WAKE-UP2.)

1. Tune to FM 103.00 MHz (STATION 9) using the STATION CALL function.
2. Press the SET button, then the WAKE-UP1 button within 7 seconds.
3. Set the hour and minutes value of your desired wake-up time by using the "-" (DOWN) and "+" (UP) buttons.
4. Press the SET button.
After the SET button is pressed, a time of one hour after the wake-up time will be displayed. If you want to set this time for turning the sound source OFF, press the SET button.
If you want to set a different time, proceed as follows:
5. Set the hour and minutes value of the turn-off time by using the "-" (DOWN) and "+" (UP) buttons.
6. Press the SET button.
ON time, OFF time and function are displayed.

[To Activate the Timer]

7. Turn the power off if it is set to ON.

[To Change The Timer Setting]

Input the new setting, beginning with the first step.

[If You Make a Mistake While Setting the Timer]

Complete the entire process first, and then input correctly from the beginning.

[Turning the Timer ON/OFF]

After inputting the timer setting, check the tuner display to confirm which timer is set to ON. The timer whose indicator is lit (WAKE-UP [1] or [2]) will be activated.

Note that when the WAKE-UP button ([1] or [2]) is pressed and the indicator is off, the timer will not operate. The timer can be reactivated by pressing the WAKE-UP button, as the setting is stored in the memory.

<SNOOZE function>

After TIMER PLAYBACK starts, you can turn the power temporarily off by pressing the SNOOZE button of the remote control unit. The power will be turned to ON again after approximately 5 minutes.

NOTE:

If the remaining time for TIMER PLAYBACK is less than 5 minutes, the power will continue to be off and playback will not resume after 5 minutes even if the SNOOZE button is pressed.

NOTE:

When CD or TAPE has been set to TIMER, although none is actually set, or when TUNER has been set and the TUNED indicator is not lit, the unit will automatically search for a sound source and play it back.

TIMER RECORDING (Using the tuner for timer setting.)

The TIMER RECORDING function can be used only with the tuner.

(To ensure correct recording, select the desired station using the STATION CALL function and set TIMER RECORDING while listening to the radio.)

Recording will start in the forward direction (▶).

NOTE:

Make sure that the erasure prevention tabs of the cassette have not been removed.

[Timer Setting Example]

See Fig 12

Set FM 103.00 MHz (STATION 9) for TIMER RECORDING:

1. Insert a tape to be recorded into Deck II.
Note that the tape will start in the forward direction (▶) for TIMER RECORDING. Make sure that the tape is inserted in the correct direction.
2. Set the DOLBY NR switch on the cassette deck to the position of your choice.
3. Press the SET button, then the TIMER REC button within 7 seconds.
Steps 4 to 7 are the same as steps 3 through 6 of TIMER PLAYBACK (page 23).

[Activating the Timer for Recording]

8. Turn the power off if it is set to ON.
Recording will start automatically at the set time even if you do not turn the power OFF.

[To Change TIMER RECORDING setting]

Input the new setting, beginning with the first step.

[If You Make a Mistake While Setting the Timer]

Complete the process first, and then input correctly from the beginning.

[Turning the Timer ON/OFF]

Confirm that [REC] is lit on the tuner display.

Note that the TIMER RECORDING mode is valid only for one recording. You can reactivate the timer by pressing the [REC] button (the [REC] indicator lights) again, as the setting is stored in the memory.

[Confirming the WAKE UP TIMER and REC TIMER]

The timer to be checked can be selected by pressing the CHECK button several times.

When the CHECK button is not pressed for 2 seconds or more, the contents of the timer settings are continuously indicated in a 2 second interval.

[TIMER Setting Priority]

- If more than one timer is set, and their operation times are overlapping, the timer with the earlier starting time has priority. The other timer(s) will not be activated.
- If more than one timer is set and their starting time has been set at the same time, they will be activated in the sequence of REC, WAKE-UP1 and WAKE-UP2.
- If the OFF time of the SLEEP timer is set within the operating time of one or more additional timer, the SLEEP timer has priority.

MICROPHONE MIXING

Mixing involves combining the signals from two input sources (a microphone and a tape, for example).

MIXING PROCEDURE

1. Plug a microphone into MIC jack.
2. Adjust VOLUME to a suitable level.
3. Set MIC LEVEL control position between MIN and MAX.
 - If howling occurs (a high-pitched sound from the speakers), take the following steps.
 1. Move the microphone away from the speakers.
 2. Lower the volume.
4. Select the desired program source using input selector buttons.
5. Start playback of the program source.
6. Adjust VOLUME control.
7. Use MIC LEVEL control to adjust the microphone level in relation to the music source.
8. Talk or sing into the microphone.

MIXING RECORDING

You can use the mixing feature to recording input from a microphone and another source together.

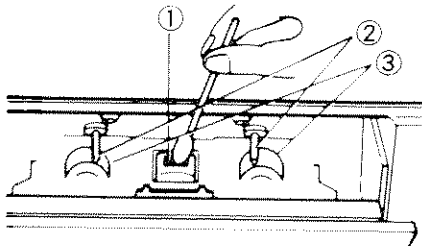
1. Perform steps 1 to 7 in the section "MIXING PROCEDURE".
2. Load a tape for recording into Deck II.
Press REC button (●) on Deck II.
4. Press PLAY button (▶ or ◀) on Deck II.
5. Sing along with the program source.

NOTE:

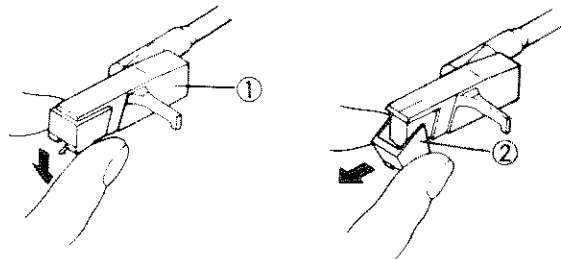
When microphone mixing while playing back on Deck I, mixing recording is not possible on Deck II.

MAINTENANCE

1



2



CLEANING THE HEAD SECTION

The heads, capstan and pinch roller are parts which are liable to get dirty quite easily. In particular, if the heads are dirty, the high frequency components of the sound will not be reproduced and the stereo balance will be impaired, resulting in a deterioration of sound quality. It is therefore recommended that the head section be cleaned regularly.

- Press EJECT button to open the cassette door.
- Dip a cleaning swab into head cleaning fluid and use it to wipe the head, capstan, and pinch rollers. Wait 2–3 minutes till cleaning fluid dries.

See Fig [1].

1: Head 2: Capstan 3: Pinch roller

NOTE:

- This unit uses a head-slant standby system, with the result that the heads are mounted at an angled position.

DEMAGNETIZING THE HEAD

The recording/playback head becomes magnetized when you use the cassette deck for prolonged periods of time. This results in noise being generated and the treble dropping off during recording and playback. The recording/playback head should therefore be demagnetized regularly with a commonly sold head demagnetizer.

For further details, refer to the operating instructions accompanying your head demagnetizer.

NOTE:

- Do not hold screwdriver, metal objects or magnets close to the heads.
- When demagnetizing the heads, be sure the unit's POWER button is in the STANDBY position.

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzine, insecticide sprays and other chemicals on or near this unit, since these will corrode the surfaces.

REPLACING THE STYLUS

See Fig [2].

1. Remove the stylus gently.
2. Attach the new stylus to the cartridge.

(1): Cartridge

(2): Stylus

NOTE:

- The service life of the stylus on the supplied cartridge ranges from 800 to 1,000 hours. (After about one year if you play records, about two hours everyday. However, the stylus may need to be replaced earlier depending on the way it is used.)
- Using a worn or damaged stylus can damage your records and distort the sound reproduction. Remember to replace the stylus at the earliest possible date.
- Always use the PIONEER "PN-210" as a replacement stylus.
- Always ask for a genuine PIONEER replacement stylus.

PRECAUTION:

If the turntable is placed directly on or very close to a speaker, the vibrations from the speaker may be transported to the tonearm's cartridge, thus causing feedback howling. Be sure that speakers are placed sufficiently away from the turntable.

TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used.

If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Cassette Deck and Amplifier Section

Symptom	Cause	Remedy
Power button is on but power does not turn on.	AC cord is unplugged.	Plug power cord into AC outlet.
No sound from speakers.	- Volume is turned all the way down. - Speaker cords are disconnected. - Speaker cords are connected with vinyl insulation still on. - Function is not set to your desired listening source. - Connection cords are not connected or are damaged.	- Raise volume knob setting. - Connect speaker cords correctly. - Strip vinyl insulation from speaker wire tips before connecting. - Select correct input selector. - Connect correctly or replace with good quality cords.
Sound from only one speaker.	One of the speaker cords is disconnected or damaged.	Connect correctly or replace with good quality cord.
Tape does not move.	- Deck is in pause mode. - Cassette inserted incorrectly.	- Press PAUSE or PLAY button. - Put cassette properly in holder.
No sound heard from tape.	- Input selector not set to TAPE. - Playing unrecorded tape.	- Set input selector to TAPE. - Play a recorded tape.
Tape sounds unclear, not loud enough.	Dirty head.	Clean head.
Cannot record.	- Erase prevention tabs are broken off. - Dirty head. - Tape to be recorded is in Deck I.	- Put tape over tab holes. - Clean head. - Put tape in Deck II (Deck I cannot record).
Cannot copy tape.	- One deck has no tape loaded. - Tape in Deck II has erasure prevention tabs broken off.	- Load tapes in both decks. - Use cassette that can be recorded on.
Treble tones unclear.	- Dirty head. - DOLBY NR system is ON when listening to a tape recorded without DOLBY NR.	- Clean head. - Use same noise reduction system for playback as for recording. (Do not play tapes recorded with different NR systems.)
Treble tones too strong.	Tape recorded with DOLBY NR but played without.	Play in same condition as recording. (Turn on DOLBY NR switch for recorded tapes with DOLBY NR.)
Strange sounds heard (or recorded from) tape, CD, or radio.	- TV is on. - This unit is too close to TV.	- Turn off TV. - Move TV away until interference stops. - Copy using NORMAL instead of HIGH speed.

Tuner

Symptom	Cause	Remedy
No reception.	- Antenna not connected. - Wrong radio band. - Station not tuned in. - Input selector not set to TUNER.	- Connect antenna correctly. - Set to desired radio band. - Tune in station. - Set input selector to TUNER.
Beat noise heard.	- TV is on. - Loop antenna position bad.	- Turn off TV or move TV away. - Change loop antenna position.
Noise heard.	- Interference from nearby fluorescent light, hair dryer, or other electrical appliance. - Not tuned in correctly.	- Stop using device causing interference. - Use tuner controls to tune in station.
Sound is distorted.	- Antenna in poor position. - Broadcast is weak. - Interference from other electrical devices or multipath reception.	- Change antenna position. - Use external antenna. - Change antenna position.
Stereo FM broadcast not in stereo.	- Signal is too weak, antenna input is insufficient. - MPX mode is MONO.	- Use an multi-element outside antenna instead. - Cancel MONO mode with the MPX button.

Remote Control Unit

Remote control does not work.	- Batteries are dead or no batteries in remote control unit. - Poor angle or too great a distance from the remote sensor window. - There is an obstacle between you and the remote sensor window. - A fluorescent light is shining on the remote sensor window.	- Insert new batteries. - Use within seven meters and within a 30 degree angle of the remote sensor window. - Change your position or move the obstacle. - Turn off the light.
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Clock and Timer

Symptom	Cause	Remedy
No time indication.	- There was a power blackout. - AC plug was pulled.	- Set time again. - Set time again.
Timer does not work.	- Current time is not set. - Start and/or stop time is not set. - Timer is not on.	- Set current time. - Set ON and OFF times. - To use timer, press the timer selector button so that the timer display lights.

Turntable

Platter does not turn.	Belt is off.	Put belt correctly on platter.
No sound.	Input selector not set to PHONO.	Set input selector to PHONO.
Noise or scratchy sounds.	- Dust on record. - Scratch on record.	- Clean record. - Use good record.

Abnormal functioning of this unit may be caused by lightning, static electricity, or other external interference. To restore normal operation, turn the power off and then on again, or unplugging the AC power cord and then plug it in again.

SPECIFICATIONS

Stereo double cassette deck amplifier: DC-Z74

Amplifier Section

Continuously Average Power Output is 27 Watts* per channel, min., at 8 ohms from 40 Hertz to 20,000 Hertz, with no more than 0.4 % total harmonic distortion.**

** Measured pursuant to the Federal Trade Commission's Trade Regulation rules on Power Output Claims for Amplifiers.*

DIN music power..... 50 W + 50 W (1 kHz, T.H.D. 1 %, 8 ohms)
Continuous Power Output (DIN) 33 W + 33 W
(1 kHz, T.H.D. 1 %, 8 ohms)
Peak Music Power Output 350 W (1 kHz, T.H.D. 10 %, 6 Ω)
Graphic equalizer frequency band 100 Hz, 330 Hz,
1 kHz, 3.3 kHz, 10 kHz, ± 7 dB
Total Harmonic Distortion
(40 Hz to 20,000 Hz, 16.5 W, 8 ohms)* No more than 0.2 %

Tape Deck Section

Systems 4 track, 2-channel stereo
Heads Recording/playback head x 1
Playback head x 1
Erasing head x 1
Motor DC servo 2 speed motor x 2
Wow and Flutter No more than 0.09 % (WRMS)
Fast Winding Time Approximately 105 seconds
(C-60 tape)

Frequency Response (— 20 dB recording):

Normal tape 35 Hz to 14,000 Hz ± 6 dB (EIAJ)
CrO₂ tape 35 Hz to 15,000 Hz ± 6 dB (EIAJ)
Signal-to-Noise ratio
Dolby NR OFF 56 dB (EIAJ)
Noise Reduction Effect
Dolby B type NR ON More than 10 dB (at 5 kHz)

Miscellaneous

Power requirements

Australian models a.c. 240 Volts ~, 50/60 Hz
Other destination models
..... AC 110/120—127/220/240 V (Switchable), 50/60 Hz
Power Consumption 216 W
Dimensions 360 (W) x 271 (H) x 307 (D) mm
14-3/16 (W) x 10-11/16 (H) x 12-1/16 (D) in
Weight (without package) 7.2 kg (15 lb 14 oz)

Furnished Parts

Operating Instructions 1
Remote control unit 1
Dry cell batteries 2

FM/AM tuner: F-Z94

FM Tuner Section

Frequency range 87.5 MHz to 108 MHz
Usable Sensitivity Mono: 12.8 dBf, IHF (1.2 μV/75 Ω)
Sensitivity (DIN) Mono S/N 26 dB: 1 μV/75 Ω
Stereo S/N 46 dB: 35 μV/75 Ω

Signal-to-Noise Ratio (IHF, 85 dBf Input) Mono: 77 dB
Signal-to-Noise Ratio (DIN) Mono: 66 dB
Stereo: 60 dB
Distortion Stereo: 0.5 % (1 kHz)
Antenna Input 75 ohms unbalanced

MW (AM) Tuner Section

Frequency range
With 10 kHz step 530 kHz to 1,700 kHz
With 9 kHz step 531 kHz to 1,602 kHz
Sensitivity (IHF, Loop antenna) 350 μV/m
Antenna Loop Antenna

Miscellaneous

Dimensions 360 (W) x 68 (H) x 316 (D) mm
14-3/16 (W) x 2-11/16 (H) x 12-7/16 (D) in
Weight (without package) 2.2 kg (4 lb 14 oz)

Furnished Parts

FM T-type Antenna 1
AM Loop Antenna 1

Turntable: PL-Z94

Motor, Platter

Motor Type DC servo motor
Drive Method belt drive
Speed 33-1/3, 45 RPM
Wow and Flutter 0.07 % WRMS (JIS)
± 0.10 % WTD Peak (DIN)
Signal-to-Noise Ratio 63 dB (DIN-B)
Platter 295 mm dia., aluminum die-cast

Tonearm

Type Dynamic balance type, straight tonearm

Installed Cartridge

Type MM Type
Stylus 0.6 mil diamond
Replacement Stylus PN-210
Output voltage 2.5 mV (1 kHz, 5 cm/s, Lat. peak)
Tracking Force 2.0 — 3.0 g (optimum 2.5 g)
Frequency Response 20 Hz to 25,000 Hz
Load Resistance 47 kΩ
Cartridge Weight 4 g

Other

Dimensions 360 (W) x 90 (H) x 359.5 (D) mm
14-3/16 (W) x 3-9/16 (H) x 14-1/8 (D) in
Weight 2.3 kg (5 lb 1 oz)

Accessories

EP Adaptor 1

- Specifications and design subject to possible modification without notice due to improvement.

• • Measured By Audio Spectrum Analyzer.

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